

CLAIMS

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1.(currently amended) A material distributing device comprising,

a hopper for carrying a load of material to be distributed,

the hopper having a front end and a rear end and a bottom sloped upward from the front end to the rear end,

a conveyor belt having paddles thereon for engaging and moving the material to be distributed, the conveyor belt supported by a ridged unjointed framework which is pivotally connected to the hopper at the rear end near the bottom and engages the material in the hopper from the top of the material, such that as the conveyor belt pivots downward it becomes parallel to the bottom of the hopper,

the conveyor belt framework being triangular with a first apex of the triangle at the rear end near the bottom of the hopper, a second apex of the triangle being at the front end of the hopper, and a third apex being above and generally forward of the first apex, such that material is moved by the conveyor belt forward on the underside of the conveyor belt from the first apex to the second apex and then rearward and upward on the top of the conveyor belt from the second apex to the third apex, and then discharged at the rear end of the hopper by flowing downward from the third apex toward the first apex,

a drive mechanism attached to the conveyor belt for powering the conveyor belt and removing the material from the hopper.

2. (original) A material distributing device as in claim 1 wherein,

the hopper is supported on a trailer, and

the drive mechanism includes a trailer wheel having a sprocket, the sprocket having a chain for transmitting power to a sprocket on a drive axel for turning the conveyor belt such that as the drive wheel of the trailer turns when the trailer is moving the conveyor belt moves at a rate proportional to the trailers speed to unload the material in the hopper to distribute the load at a known rate.

3. (original) A material distributing device as in claim 2 wherein,

a clutch attached to the sprocket on a drive axel for turning the conveyor belt alternately engages the drive axel to distribute the material in the hopper at desired times.

4. (original) A material distributing device as in claim 2 wherein,

a gear shifting mechanism in conjunction with the sprocket on the drive wheel and the sprocket on the drive axel for turning the conveyor belt changes the ratio of the drive wheel speed to the conveyor belt speed for varying the rate of material distribution from the hopper.

5. (original) A material distributing device as in claim 3 wherein,

a gear shifting mechanism in conjunction with the sprocket on the drive wheel and the sprocket on the drive axel for turning the conveyor belt changes the ratio of the drive wheel speed to the conveyor belt speed for varying the rate of material distribution from the hopper.

6. (original) A material distributing device as in claim 3 wherein,

a drive motor drives the drive axel for turning the conveyor belt such that the material can be unloaded from the hopper when the motor is on and unloads the hopper at a rate directly proportional to the motor speed.

7. (original) A material distributing device as in claim 1 wherein,

a drive mechanism raises and lowers the conveyor belt support framework to engage or disengage the conveyor belt from the material to be distributed and to aid in loading the hopper with the conveyor out of the way.

8. (original) A material distributing device as in claim 2 wherein,

a drive mechanism raises and lowers the conveyor belt support framework to engage or disengage the conveyor belt from the material to be distributed and to aid in loading the hopper with the conveyor out of the way.

9. (original) A material distributing device as in claim 3 wherein,

a drive mechanism raises and lowers the conveyor belt support framework to engage or disengage the conveyor belt from the material to be distributed and to aid in loading the hopper with the conveyor out of the way.

10. (original) A material distributing device as in claim 4 wherein,

a drive mechanism raises and lowers the conveyor belt support framework to engage or disengage the conveyor belt from the material to be distributed and to aid in loading the hopper with the conveyor out of the way.

11. (original) A material distributing device as in claim 5 wherein,

a drive mechanism raises and lowers the conveyor belt support framework to engage or disengage the conveyor belt from the material to be distributed and to aid in loading the hopper with the conveyor out of the way.

12. (original) A material distributing device as in claim 6 wherein,

a drive mechanism raises and lowers the conveyor belt support framework to engage or disengage the conveyor belt from the material to be distributed and to aid in loading the hopper with the conveyor out of the way.